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REMARKS

Claims 1-19 are all the claims presently pending in the application. Claims 1-13 have been amended to more particularly define the invention. Claims 14-19 have been added to assure Applicant the degree of protection to which his invention entitles him.

It is noted that the claim amendments herein or later are <u>not</u> made to distinguish the invention over the prior art or narrow the claims or for any statutory requirements of patentability. Further, Applicant specifically states that <u>no</u> amendment to any claim herein or later should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-13 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 1-2, 6-7, and 11-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ausubel (U.S. Patent No. 5,905,975). Claims 3-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ausubel, and further in view of McAfee et al. (U.S. Patent No. 6,718,312 B1). Claims 8-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ausubel in view of Macready et al. (U.S. Publication No. 2002/0016759).

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

An exemplary aspect of the invention, as recited in claim 1, is directed to a computer implemented method for an auction including establishing an auction system, receiving at least one constraint specified by a participant in the auction, wherein the constraint

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characterizes combinations of items desired by the participant within the auction system, and

determining a winner in the auction, based on the constraint specified by the participant.

Another aspect of the invention, as recited in claim 13, is directed to a program medium executable in a computer system for facilitating an auction. The program medium including machine-readable instructions to cause the computer system to execute steps for establishing an auction system, enabling the auction system so that it is responsive to constraints specified by a participant in the auction, wherein the constraints characterize combinations of items desired by the participant within the auction system, and generating a proposal, based on the constraints specified by the participant, using a column generation formulation.

A further aspect of the invention, as recited in claim 14, is directed to a computer implemented method for facilitating an auction including receiving constraints specified by a participant in the auction, wherein the constraints characterize combinations of items desired by the participant within the auction system, and formulating a winner determination problem, with the constraints specified by the participant, as an integer problem.

The claimed invention provides, amongst other features, constraints specified by a participant in the auction, wherein the constraints characterize combinations of items desired by the participant within the auction system. In this manner, each bidder may place individual bids for items of interest to them and specify a value for each item of interest. The constraints are specified by the bidders, rather than the sellers, and each bidder can specify their own set of constraints, such as total budget, either/or constraints, or precedent constraints. The invention takes the constraints specified by each bidder and determines the

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winning bids that maximize total revenue without violating any of the bidders individual constraints.

II. THE 35 USC §101 REJECTION

Claims 1-13 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The claims have been amended, above, to overcome this rejection. Specifically, independent claims 1 and 13 have been respectively amended to require the use of the technological arts and to require the execution of intended functions.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

III. THE PRIOR ART REFERENCES

A. The Ausubel Reference

The Examiner alleges that the invention of claims 1, 2, 6, 7 and 11-13 are anticipated by Ausubel. However, Applicant respectfully submits that the reference does not teach or suggest each and every element of the claimed invention.

Ausubel discloses a computer implemented system and method of executing an auction including at least two intelligent sytems. (See Ausubel at Abstract)

However, Ausubel does not teach or suggest constraints specified by a participant in the auction, wherein the constraint characterizes combinations of items desired by the participant within the auction system, as in independent claims 1, 13 and 14.

In fact, the Examiner concedes that Ausubel does not teach or suggest such a feature in Item 3, page 3 of the Office Action.

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Ausubel discloses that that the bidders are required to express combinatorial bids. As such, the bidders in Ausubel must explicitly list all acceptable combinations of items along with a value of each listed combination. However, bid formation and valuation in this manner is complex, and typically performed by experts, sometimes with the aid of economic modeling tools.

In the present invention, on the other hand, the invention does not require the bidders to express combinatorial bids. As noted above, each bidder (e.g. a casual eBay user with no economic or mathematical expertise) can place individual bids for each item of interest to him/her while specifying a value for each item of interest. The present invention provides a method that takes the constraints specified by each bidder and determines the winning bids that maximize total revenue without violating any of the bidders individual constraints

Clearly, there are elements of the invention of claims 1, 2, 6, 7 and 11-13 that are not taught or suggest by Ausubel. Therefore, the Examiner is respectfully requested to withdraw this rejection.

B. The McAfee et al. Reference

The Examiner alleges that Ausubel would have been combined with McAfee et al. to form the invention defined in claims 3-5. However, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

McAfee et al. discloses a method and system for dynamic combinatorial auctions employing bid composition restrictions. (See McAfee et al. at Abstract)

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Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teach or suggest their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

The Examiner concedes that Ausubel does not teach or suggest that the constraint characterizes combinations of items desired by the participant within the auction system, as recited in claims 3-5. Rather, the Examiner attempts to rely on McAfee et al. to make up for the deficiencies of Ausubel.

However, these features are <u>not</u> taught or suggested by McAfee et al. In fact, nowhere do the passages cited by the Examiner teach or suggest that the constraint characterizes combinations of items desired by the participant within the auction system, as in the claimed invention.

Rather, McAfee et al. addresses simultaneous ascending auctions (SAA), in which multiple items are auctioned simultaneously in fixed rounds. However, in an SAA there are fixed, synchronized rounds, with the entire allocation being determined at the end of each round. Further, in an SAA, as disclosed in McAfee et al., the additional "restrictions" are placed by the auctioning organization or seller and apply uniformly to all bidders.

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Clearly, neither Ausubel, nor McAfee et al., nor any combination thereof, teaches or suggests that the constraint characterizes combinations of items desired by the participant within the auction system, as in the claimed invention. Thus, McAfee et al. fails to make up for the deficiencies of Ausubel described above.

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Therefore, Applicant submits that there are elements of the invention of claims 3-5 that are <u>not</u> taught or suggested either Ausubel, or McAfee et al., or any combination thereof. Therefore, the Examiner is respectfully requested to withdraw this rejection.

C. The Macready et al. Reference

The Examiner alleges that Ausubel would have been combined with Macready et al. to form the invention defined in claims 8-10. However, Applicant submits that these references would <u>not</u> have been combined and even if combined, the combination would <u>not</u> teach or suggest each and every element of the claimed invention.

Macready et al. discloses a system which allows buyers to define their preferences and sellers to define their capabilities, then determines which trading points maximize the utility of the buyer. (Macready et al. at Abstract)

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the Examiner can point to no motivation or suggestion in the references to urge the combination as alleged by the Examiner. Indeed, contrary to the Examiner's allegations, neither of these references teach or suggest their combination.

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Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

The Examiner concedes that Ausubel does not teach or suggest that seller constraints specify a minimum value for a combination of items, or that the seller constraints specify a minimum number of items to be sold, or that the seller constraints specify a minimum value for a combination of items correlated to a precedence relationship, as in claims 8, 9 and 10, respectively. Rather, the Examiner attempts to rely on Macready et al. to make up for the deficiencies of Ausubel.

Macready et al. discloses representing buyer preferences and seller capabilities in terms of multidimensional mathematical expressions, and then searching and visualizing this space for the purpose of identifying one or more potential matches. Macready et al. provides a compact encoding of buyer and seller information and a notion of "distance" between a request and a capability or offering, to enable rapid searching by a computer implemented algorithm.

However, Macready et al. makes no reference to the seller constraints specifying any of a minimum value for a combination of items, or a minimum number of items to be sold, or a minimum value for a combination of items correlated to a precedence relationship, as in claims 8-10. Rather, Macready et al. merely notes that "[b]uyers and sellers may express constraints over both continuous and discrete variables," (Macready et al. at page 6, paragraph [0077]) and that "a seller [may] express additional linear constraints" (Macready et al. at page 8, paragraph [0108].

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Further, Macready et al. fails to make up for the deficiencies of Ausubel and McAfee et al. described above directed to that the constraint characterizes combinations of items desired by the participant within the auction system, as in the claimed invention.

Thus, even assuming <u>arguendo</u> that Macready et al. may disclose the seller constraints specifying any of a minimum value for a combination of items, or a minimum number of items to be sold, or a minimum value for a combination of items correlated to a precedence relationship, as alleged by the Examiner, there is no teaching or suggestion in Macready et al. that the constraint characterizes combinations of items desired by the participant within the auction system, as in the invention of claims 8-10. Indeed, the cited reference does not even recognize the desirability or benefit of providing such a feature. Therefore, Macready et al. clearly does not make up for the deficiencies of Ausubel and McAfee et al.

Therefore, Applicant submits that there are elements of the invention of claims 8-10 that are not taught or suggested either Ausubel, Macready et al., McAfee et al., or any combination thereof. Therefore, the Examiner is respectfully requested to withdraw this rejection.

IV. CONCLUSION

In view of the foregoing, Applicant submits that claims 1-19, all the claims presently pending in the application, are patentably distinct over the prior art of record and are allowable, and that the application is in condition for allowance. Such action would be appreciated.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned attorney at the local telephone number

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listed below to discuss any other changes deemed necessary for allowance in a telephonic or personal interview.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136. The Commissioner is authorized to charge any deficiency in fees, including extension of time fees, or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: August 8__, 2005

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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment was filed by facsimile with the United States Patent and Trademark Office, Examiner Siegfried E. Chencinski, Group Art Unit #3628 at fax number (571) 273-8300 this 8th day of August, 2005.

Date: August 8, 2005

J. Bradley Wright, Esq.

1. A.